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EXAMINER

MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/405,242

Applicant(s)

SILVESTER ET AL.

Examiner

Tony Mahmoudi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 23-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

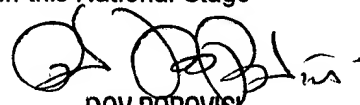
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



DOV POPOVICH

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Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. In response to communications filed on 06-May-2004, independent claims 1, 9, and 14 are amended per applicant's request. Claims 1-25 are presently pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S. C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 1-5, 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjorn (U.S. Patent No. 6,035,398) in view of Buffam (U.S. Patent No. 6,185,316), and further in view of Beatson et al (U.S. Patent No. 5,892,824).

As to claim 1, Bjorn teaches a method for the separate authentication of a template and of user data inserted therein, comprising the steps of

a) providing the template, the template having a corresponding template ID and template Document Authentication Code, hereinafter referred to as DAC(t), linked thereto (see column 8, lines 62-65, where "DAC(t)" is read on "public key");

b) inserting the user data in the template (see column 4, lines 21-24);

c) extracting the user data from the template (see column 3, line 66, column 4, line 1, where "user data" is read on "fingerprint features"); and

d) generating a user data Document Authentication Code, hereinafter referred to as DAC(d), based on the user data (see column 4, lines 25-30, where "DAC(d) is read on "cryptographic key".)

Bjorn does not teach the template having template Document Authentication Code based on the template.

Buffam teaches self-authentication apparatus and methods (see Abstract), in which he teaches the template having template Document Authentication Code based on the template (see Abstract, see column 10, lines 19-39, and see column 23, lines 41-44.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn to include the template having template Document Authentication Code based on the template.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn, by the teaching of Buffam, because including the template having template Document Authentication Code based on the template, would enable the method to authenticate templates based on its template Document Authentication Code, indicating template's true values and false values.

Bjorn as modified, still does not teach storing the template ID, DAC(t), the user data and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP.

Beatson et al teaches storing the template ID, DAC(t), the user data and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP (see column 14, lines 18-21).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, to include storing the template ID, DAC(t), the user data and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, by the teaching of Beatson et al because by including the storing the template ID, DAC(t), the user data and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP, would facilitate the retrieval of these elements for post processing.

As to claim 2, Bjorn as modified teaches wherein step a) comprises the substeps of

- i) generating the template (see Bjorn, column 3, lines 42-44) ;
- ii) creating the template ID (It is inherent that for every template, there is a template identification associates with it);
- iii) creating DAC(t) (see Bjorn, column 1, lines 54-55, where "DAC(t)" is read on "digital certificate");

Bjorn as modified does not teach and iv) storing the template ID and DAC(t) in a location linked to the template.

Beatson et al teaches (see column 22, lines 15-20) and storing the template ID and DAC(t) in a location linked to the template (see column 14, lines 18-21, where

"DAC(t)" is read on "template authentication code").

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified to include

storing the template ID and DAC(t) in a location linked to the template.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, by the teaching of Beatson et al because by including storing the template ID and DAC(t) in a location linked to the template, would facilitate the retrieval of DAC(t) for post processing.

As to claim 3, Bjorn as modified teaches wherein substep a) iii) comprises generating DAC(t) from a one-way hash function (see Bjorn, column 3, lines 44-45).

As to claim 4, Bjorn as modified teaches wherein, in substep a) iv), the location linked to the template is inside the template (see Bjorn, column 4, lines 48-51).

As to claim 5, Bjorn as modified teaches wherein, in substep a) iv), the location linked to the template is a linked storage system (see Bjorn, column 6, lines 62-65, where "linked storage system" is read on "database").

As to claim 14, Bjorn teaches a method for the separate authentication of a template and of user data inserted therein, comprising the steps of:

- a) providing the template, said template having a corresponding template ID and template Document Authentication Code, hereinafter referred to as DAC(t), linked thereto;
- b) inserting the user data in the template (see column 4, lines 21-24);
- c) generating a complete Document Authentication Code, hereinafter referred to as DAC(c), based on the template with the user data therein (see column 4, lines 21-28" where "complete document" is read on "template includes all of the identifying features" and "DAC(c)" is read on "cryptographic key");
- d) extracting the user data from the template (see column 3, line 66, column 4, line 1, where "user data" is read on "fingerprint features");
- e) generating a user data Document Authentication Code, hereinafter referred to as DAC(d), based on the user data (see column 4, lines 25-30, where "DAC(d)" is read on "cryptographic key".)

For the teaching of "the template having template Document Authentication Code based on the template", the applicant is directed to the remarks and discussions made in claim 1 above, in view of the teaching of Buffam.

Bjorn as modified, still does not teach:

- f) storing the template ID, DAC(t), the user data, DAC(c) and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP.

Beatson et al teaches:

- f) storing the template ID, DAC(t), the user data, DAC(c) and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP (see column 14, lines 16-30; and see Fig. 6).

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Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, to include storing the template ID, DAC(t), the user data, DAC(c) and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, by the teaching of Beatson et al because by including storing the template ID, DAC(t), the user data, DAC(c) and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP, would facilitate the retrieval of these elements for post processing.

As to claim 15, Bjorn as modified teaches, wherein step a) comprises the substeps of

- i) generating the template (see Bjorn, column 3, lines 42-44);
- ii) creating the template ID (It is inherent that for every template, there is an template identification associated with it);
- iii) creating DAC(t) (see Bjorn, column 1, lines 54-55, where "DAC(t)" is read on "digital certificate");

Bjorn as modified does not teach:

- iv) storing the template ID and DAC(t) in a location linked to the template.

Beatson et al teaches:

- iii) creating DAC(t) (see column 22, lines 15-20); and
- iv) storing the template ID and DAC(t) in a location linked to the template (see column 14, lines 18-21, where "DAC(t)" is read on "template authentication code").

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, to include the creating of DAC(t) and storing the template ID and DAC(t) in a location linked to the template.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, by the teaching of Beatson et al because by including the creation of DAC(t), would prevent the tampering of the template by external sources and by including storing the template ID and DAC(t) in a location linked to the template, would facilitate the retrieval of DAC(t) for post processing.

As to claim 16, Bjorn as modified teaches wherein substep a) iii) comprises generating DAC(t) from a one-way hash function (see Bjorn, column 3, lines 44-45).

As to claim 17, Bjorn as modified teaches wherein, in substep a) iv), the location linked to the template is inside the template (see Bjorn, column 4, lines 48-51).

As to claim 18, Bjorn as modified teaches, wherein, in substep a) iv), the location linked to the template is a linked storage system (see Bjorn, column 6, lines 62-65, where "linked storage system" is read on "database").

4. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjorn (U.S. Patent No. 6,035,398) in view of Buffam (U.S. Patent No. 6,185,316), and

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further in view of Beatson et al (U.S. Patent No. 5,892,824), as applied to claims 1-5, 14-18 above, and still further in view of Weiss et al (U.S. Patent No. 6,071,190).

As to claim 6, Bjorn as modified does not teach wherein step e) further comprises encrypting the ADP.

Weiss et al teaches wherein step e) further comprises encrypting the ADP (see column 14, lines 1-3).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, to include the step of encrypting the ADP.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, by the teaching of Weiss et al because by include the step of encrypting the ADP, would further secure the ADP from being tampered.

As to claim 19, Bjorn as modified does not teach wherein step 0 further comprises encrypting the ADP.

Weiss et al teaches wherein step f) further comprises encrypting the ADP (see column 14, lines 1-3).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, to include the step of encrypting the ADP.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, by the teaching of Weiss et al

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because by include the step of encrypting the ADP, would further secure the ADP from being tampered.

5. Claims 7, 20 and 22 are rejected under 35 U.S. C. 103 (a) as being unpatentable over Bjorn (U.S. Patent No. 6,035,398) in view of Buffam (U.S. Patent No. 6,185,316), and further in view of Beatson et al (U.S. Patent No. 5,892,824), as applied to claims 1-5, 14-18 above, and still further in view of Douglis et al (U.S. Patent No. 6,021,426).

As to claims 7 and 20, Bjorn as modified does not teach an additional step f) of reconstructing an authenticated complete document, the complete document including the template and the user data.

Douglis et al teaches an additional step f) of reconstructing an authenticated complete document, the complete document including the template and the user data (see column 2, lines 36-51, where "complete document" is read on "a complete and updated resource; column 3, lines 46-50; and column 6, lines 22-24, where "template" is read on "static portion" and "user data" is read on "dynamic portion").

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, to include the step of reconstructing an authenticated complete document, the complete document including the template and the user data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, by the teaching of Douglis et al, because by including the step of reconstructing an authenticated complete document, the

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complete document including the template and the user data, would verified that the user data is correctly corresponded with the template.

As to claim 22, Bjorn as modified teaches, wherein step g) comprises the substeps of

i) retrieving the template ID, the user data and DAC(c) from the ADP;

ii) opening the template corresponding to the template ID;

iii) inserting the user data in the template (see Bjorn, column 4, lines 21-24, by creating the template for the user, the template is opened, and it is inherent that there is an template identification associates with a template);

iv) generating for the template with the user data therein a new complete Document Authentication Code, hereinafter referred to as DAC(nc); (see Bjorn, column 8, lines 62-65, where "new template Document Authentication Code" is read on "public key" and "template" is read on fingerprint template");

v) comparing DAC(nc) with DAC(c), and proceeding only if DAC(nc) is equal to DAC(c) (see Bjorn, column 9, lines 20-30, where "DAC(t)" is read on "finger print received from the user").

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bjorn (U.S.

Patent No. 6,035,398) in view of Buffam (U.S. Patent No. 6,185,316), and further in view of Beatson et al (U.S. Patent No. 5,892,824), and still further in view of Douglis et al (U.S. Patent No. 6,021,426), as applied to claims 7, 20, and 22 above, and yet further in view of Squilla et al (U.S. Patent No. 5,898,779).

As to claim 8, Bjorn as modified teaches wherein step f) comprises the substeps to of

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i) retrieving the template ID and DAC(t) from the ADP;
ii) opening the template corresponding to the template ID;
iii) generating for the template a new template Document Authentication Code, hereinafter referred to as DAC(nt) (see Bjorn, column 8, lines 62-65, where "new template Document Authentication Code" is read on "public key" and "template" is read on "fingerprint template");

iv) comparing DAC(nt) with DAC(t), and proceeding only if DAC(nt) is equal to DAC(t) (see Bjorn, column 9, lines 20-30, where "DAC(t)" is read on "fingerprint received from the user");

viii) inserting the user data in the template (see Bjorn, column 4, lines 21-24);

Bjorn as modified does not teach:

v) retrieving the user data and DAC(d) from the ADP;

vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd);

vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d). Squilla et al teaches:

v) retrieving the user data and DAC(d) from the ADP; vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd);

vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d) (see column 8, lines 9-14, where "user data" is read on "selected pixel values", "new user data Document Authentication Code" is read on "new hash value", "DAC(d) is read on "decrypted hash value").

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, to include v) retrieving the user data and DAC(d) from the ADP; vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd); vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d);

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, by the teaching of Squilla et al because by including v) retrieving the user data and DAC(d) from the ADP; vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd); vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d), would allow authentication process to authenticate and verify that the user data has not been tampered.

7. Claims 9 and 10 are rejected under 35 U. S. C. 103 (a) as being unpatentable over Chang et al (U. S. Patent No. 6,105,012) in view of Buffam (U.S. Patent No. 6,185,316), and further in view of Beatson et al (U. S. Patent No. 5,892,824).

As to claim 9, Chang et al teaches a method for the separate authentication of a template having entry fields and user data inserted into the fields (see column 10, lines 2-5, where "template" is read on "user registration form" and "user data" is read on "user information"), comprising the steps of

a) selecting a -template ID and a corresponding template Document Authentication Code, hereinafter referred to as DAC(t), linked to the template (see

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column 9, lines 25-27, where "DAC(t)" is read on "session key"; and see column 10, lines 37-40, where "template id" is read on "request = register");

- b) entering the user data;
- c) linking the user data to the fields of the template (see column 10, lines 27-36);
- d) generating a user data Document Authentication Code, hereinafter referred to as DAC(d), based on the user data; (see column 11, lines 59-66, where "user data" is read on "form data" and "DAC(d)" is read on "session key").

For the teaching of "the template having template Document Authentication Code based on the template", the applicant is directed to the remarks and discussions made in claim 1 above, in view of the teaching of Buffam.

Chang et al as modified, still does not teach:

- e) storing the template ID, DAC(t), the user data and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP.

Beatson et al teaches storing the template ID, DAC(t), the user data and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP (see column 14, lines 18-21).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, to include storing the template ID, DAC(t), the user data and DAC(d) in an Approval Data Packet, hereinafter referred to as ADP.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, by the teaching of Beatson et al because by including storing the template ID, DAC(t), the user data and DAC(d) in

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an Approval Data Packet, hereinafter referred to as ADP, would facilitate the retrieval of these elements for post processing.

As to claim 10, Chang et al as modified teaches, wherein step b) further comprises prompting the user for the user data (see Chang et al, column 4, lines 2-5, where "prompting" is read on "eliciting").

8. Claim 11 is rejected under 35 U.S. C. 103(a) as being unpatentable over Chang et al (U. S. Patent No. 6,105,012) in view of Buffam (U.S. Patent No. 6,185,316), and further in view of Beatson et al (U. S. Patent No. 5,892,824), as applied to claims 9-10 above, and still further in view of Weiss et al (U.S. Patent No. 6,071,190).

As to claim 11, Chang et al as modified does not teach, wherein step e) further comprises encrypting the ADP.

Weiss et al teaches wherein step e) further comprises encrypting the ADP (see column 14, lines 1-3).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, to include the step of encrypting the ADP.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, by the teaching of Weiss et al because by including the step of encrypting the ADP, would further secure the ADP from being tampered.

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9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al (U. S. Patent No. 6,105,012) in view of Buffam (U.S. Patent No. 6,185,316), and further in view of Beatson et al (U. S. Patent No. 5,892,824), as applied to claims 9-10 above, and further in view of Douglis et al (U.S. Patent No. U.S Patent No. 6,021,426.)

As to claim 12, Chang et al as modified, does not teach further comprising an additional step f) of reconstructing an authenticated complete document, the complete document including the template and the user data.

Douglis et al teaches an additional step f) of reconstructing an authenticated complete document, the complete document including the template and the user data (see column 2, lines 36-51, where "complete document" is read on "a complete and updated resource; column 3, lines 46-50; and column 6, lines 22-24, where "template" is read on "static portion" and "user data" is read on "dynamic portion").

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, to include the step of reconstructing an authenticated complete document, the complete document including the template and the user data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, by the teaching of Douglis et al because by including the step of reconstructing an authenticated complete document, the complete document including the template and the user data, would verified that the user data is correctly corresponded with the template.

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10. Claim 13 is rejected under 35 U.S. C. 103(a) as being unpatentable over Chang et al (U. S. Patent No. 6,105,012) in view of Buffam (U.S. Patent No. 6,185,316), and further in view of Beatson et al (U. S. Patent No. 5,892,824), and yet further in view of Douglis et al (U.S. Patent No. U.S Patent No. 6,021,426), as applied to claim 12 above, and still further in view of Bjorn (U.S. Patent No. 6,035,398) and yet further in view of Squilla et al (U.S. Patent No. 5,898,779).

As to claim 13, Chang et al as modified teaches, wherein step f) comprises the substeps of

- i) retrieving the template ID and DAC(t) from the ADP (see Chang et al, column 9, lines 25-27, where "DAC(t)" is read on "session key"; and see column 10, lines 37-40, where "template id" is read on request = "register");
- ii) opening the template corresponding to the template ID (see Change et al, column 10, lines 37-39);
- viii) inserting the user data in the template (see Chang et al, column 10, lines 27-32.)

Chang et al as modified does not teach:

- iii) generating for the template a new template Document Authentication Code, hereinafter referred to as DAC(nt);
- iv) comparing DAC(nt) with DAC(t), and proceeding only if DAC(nt) is equal to DAC(t).

Bjorn teaches:

- iii) generating for the template a new template Document Authentication Code, hereinafter referred to as DAC(nt) (see Bjorn, column 8, lines 62-65, where "new

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template Document Authentication Code" is read on "public key" and "template" is read on "fingerprint template");

iv) comparing DAC(nt) with DAC(t), and proceeding only if DAC(nt) is equal to DAC(t) (see Bjorn, column 9, lines 20-30, where "DAC(t)" is read on "fingerprint received from the user");

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, to include the step of iii) generating for the template a new template Document Authentication Code, hereinafter referred to as DAC(nt) and step iv) comparing DAC(nt) with DAC(t), and proceeding only if DAC(nt) is equal to DAC(t).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, by the teaching of Bjorn to include then step of iii) generating for the template a new template Document Authentication Code, hereinafter referred to as DAC(nt) and step iv) comparing DAC(nt) with DAC(t), and proceeding only if DAC(nt) is equal to DAC(t), would allow the verification of the fingerprint template.

Chang et al as modified still does not teach

v) retrieving the user data and DAC(d) from the ADP;

vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd);

vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d).

Squilla et al teaches:

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- v) retrieving the user data and DAC(d) from the ADP;
- vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd);
- vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d) (see column 8, lines 9-14, where "user data" is read on "selected pixel values", "new user data Document Authentication Code" is read on "new hash value", "DAC(d) is read on "decrypted hash value").

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, to include v) retrieving the user data and DAC(d) from the ADP; vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd); vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d);

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al as modified, by the teaching of Squilla et al because by including v) retrieving the user data and DAC(d) from the ADP; vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd); vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d), would allow authentication process to authenticate and verify that the user data has not been tampered.

11. Claim 21 is rejected under 35 U. S. C. 103 (a) as being unpatentable over Bjorn (U.S. Patent No. 6,035,398) in view of Buffam (U.S. Patent No. 6,185,316), and further in view of Beatson et al (U.S. Patent No. 5,892,824), and still further in view of Douglis

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et al (U.S. Patent No. 6,021,426), as applied to claims 7, 20, and 22 above, and yet further in view of Squilla et al (U.S. Patent (No. 5,898,779).

As to claim 21, Bjorn as modified teaches wherein step g) comprises the substeps of

i) retrieving the template ID, DAC(t) and DAC(c) from the ADP;

iii) generating for the template a new template Document Authentication Code, hereinafter referred to as DAC(nt) (see Bjorn, column 8, lines 62-65, where "new template Document Authentication Code" is read on "public key" and "template" is read on fingerprint template");

iv) comparing DAC(nt) with DAC(t), and proceeding only if DAC(nt) is equal to DAC(t) (see Bjorn, column 9, lines 20-30, where "DAC(t)" is read on "finger print received from the user");

viii) inserting the user data in the template (see Bjorn, column 4, lines 21-24);

ix) generating for the template with the user data therein a new complete Document Authentication Code, hereinafter referred to as DAC(nc); and (see Bjorn, column 8, lines 62-65, where "new template Document Authentication Code" is read on "public key" and "template" is read on fingerprint template");

x) comparing DAC(nc) with DAC(c), and proceeding only if DAC(nc) is equal to DAC(c) (see Bjorn, column 9, lines 20-30, where "DAC(t)" is read on "finger print received from the user");

Bjorn as modified does not teach

v) retrieving the user data and DAC(d) from the ADP;

vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd);

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vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d);

Squilla et al teaches:

v) retrieving the user data and DAC(d) from the ADP;

vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd);

vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d) (see column 8, lines 9-14, where "user data" is read on "selected pixel values", "new user data Document Authentication Code" is read on "new hash value", "DAC(d) is read on "decrypted hash value").

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, to include v) retrieving the user data and DAC(d) from the ADP; vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd); vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d);

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Bjorn as modified, by the teaching of Squilla et al because by including v) retrieving the user data and DAC(d) from the ADP; vi) generating for the user data a new user data Document Authentication Code, hereinafter referred to as DAC(nd); vii) comparing DAC(nd) with DAC(d), and proceeding only if DAC(nd) is equal to DAC(d), would allow the authentication process to authenticate and verify that the user data has not been tampered.

Allowable Subject Matter

12. Claims 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, Bjorn (U.S. Patent No. 6,035,398), Beatson et al (U.S. Patent No. 5,892,824), Weiss et al (U.S. Patent No. 6,071,190), Douglis et al (U.S. Patent No. 6,021,426), Squilla et al (U.S. Patent No. 5,898,779), Chang et al (U. S. Patent No. 6,105,012), and Buffam (U.S. Patent No. 6,185,316), do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

a) authenticating a template and user data from a first user according to the method of claim 14; and

b) for each subsequent user of multiple users, performing the substeps of:

i) retrieving the template and DAC9(c);

ii) inserting user data from previous users in a template;

iii) generating for the template with the user data from previous users therein a new template Document Authentication Code, hereinafter referred to as DAC(nc);

iv) comparing DAC(nc) with DAC(c), and proceeding only if DAC(nc) is equal to DAC(c);

v) inserting data from the current user in the template;

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(vi) generating a DAC(c), based on the template with the user data from the previous users and current user therein;

vii) extracting the user data from the previous users and current user from the template;

viii) generating a DAC(d), based on the user data extracted in step viii); and

ix) storing the user data, DAC(c) and DAC(d) in ADP, as claimed in claim 23.

Claims 24-25 are objected to as being dependents from the objected to dependent claim 23.

Response to Arguments

14. Applicant's arguments filed on 06-May-2004 with respect to the rejected claims in view of the cited references have been fully considered but they are moot in view of the new grounds for rejection.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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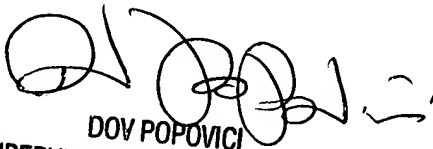
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

tm

July 2, 2004



DOV POPOVICI
SUPERVISORY PATENT EXAMINER
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